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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,367

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George J. Baley

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WHITHAM, CURTIS & CHRISTOFFERSON & COOK, P.C.

11491 SUNSET HILLS ROAD

SUITE 340

RESTON, VA 20190

EXAMINER

BROOKS, KRISTIE LATRICE

ART UNIT

PAPER NUMBER

1616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/567,367	Applicant(s) BALEY ET AL.	
	Examiner KRISTIE L. BROOKS	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 41, 46-49 and 54-57 is/are pending in the application.
- 4a) Of the above claim(s) 21-40, 42-45, and 50-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 41, 46-49 and 54-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-20, 41, 46-49, and 54-57 in the reply filed on October 21, 2009 is acknowledged.

Status of Application

2. Claims 1-57 are pending.
3. Claims 21-40, 42-45, and 50-53 are withdrawn from further consideration as being drawn to the non-elected invention and claims 1-20, 41, 46-49 and 54-57 are presented for examination below.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 4-6, 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4-6 and 41 are indefinite due to the phrase "at least about" and "greater than about", which simultaneously refers to a broad range and a narrower range. For example, the conflicting phrase "treating the crop with from greater than about 1.0kg/ha", in claim 5 is unclear as to whether the amount is at least 1.0kg/ha, in which

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the application amount cannot fall below 1.0kg/ha, or about 1.0kg/ha, in which the application amount can include a value below 1.0kg/ha. Therefore, it would be unclear to a skilled artisan, which range Applicants are claiming. For the purpose of examination, the Examiner has interpreted the phrases "at least about" and "greater than about" to mean "at least" and "greater than."

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 5-7, 9, 15-17, 54 and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanogo et al., Effects of herbicides on *Fusarium solani* f. sp. *Glycines* and Development of Sudden Death Syndrome in Glyphosate-Tolerant Soybean, *Phytopathology*, vol. 90 number 1, pp. 57-64, 2000.

Sanogo et al. teach treating glyphosate-tolerant soybeans infected with *Fusarium solani* or sudden death syndrome (see the abstract). The application rate of glyphosate is 0.84 and 1.68kg/ha (see page 57 second column last paragraph and page 60 first column second paragraph). Applicant occurred at V2 and V3 growth stages (see age 60

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first and second paragraph). In all herbicide treatments, severity of sudden death syndrome was lower in disease-resistant than in susceptible cultivars (see the abstract).

8. Claims 1-2, 9, 11, 17, 54-56 are rejected under 35 U.S.C. 102(a) as being anticipated by Harikrishnan et al., Effects on Root Rot and Damping-off caused by *Rhizoctonia solani* in Glyphosate-Tolerant Soybean, *Plant Disease*, vol. 86 No. 12, pgs 1369-1373, 2002 et al.

Harikrishnan et al., teach the treatment of *Rhizoctonia* infected glyphosate tolerant soybeans with glyphosate at an application rate of 0.84 kg/ha (see the abstract and the Materials and methods section).

9. Claims 1-2, 5-7, 14-20, 41, and 54-55 are rejected under 35 U.S.C. 102(a) as being anticipated by Zhou et al., Field Efficacy Assessment of Transgenic Roundup Ready Wheat, *Crop Science*, volume 43, 3; page 1072-1075, May/June 2003.

Zhou et al. teach treating glyphosate tolerant wheat with glyphosate at rates up to 3.6 kg/ha, which resulted in an increased crop yield when compared to the treatment of non-glyphosate tolerant wheat (see the abstract and page 1073 second column second paragraph). The application was at the 3 to 5 leaf stage (page 1073 second column second paragraph).

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Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 3-4,8,10-12, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanogo et al., Effects of herbicides on *Fusarium solani* f. sp. *Glycines* and Development of Sudden Death Syndrome in Glyphosate-Tolerant Soybean, *Phytopathology*, vol. 90 number 1, pp. 57-64, 2000.

Applicant claims a method for reducing disease on a crop infected with at least one pathogen, comprising: providing an herbicide resistant crop; and treating the crop with glyphosate, thereby reducing the effects of the pathogen on the crop.

Determination of the scope and content of the prior art

(MPEP 2141.01)

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Sanogo et al. teach treating glyphosate-tolerant soybeans infected with *Fusarium solani* or sudden death syndrome (see the abstract). The application rate of glyphosate is 0.84 and 1.68kg/ha (see page 57 second column last paragraph and page 60 first column second paragraph). Applicant occurred at V2 and V3 growth stages (see age 60 first and second paragraph). In all herbicide treatments, severity of sudden death syndrome was lower in disease-resistant than in susceptible cultivars (see the abstract).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Sanogo et al. do not teach separate applications of glyphosate applied at least seven days apart. Sanogo et al. also do not teach at least two separate applications of glyphosate.

Finding of prima facie obviousness

Rational and Motivation (MPEP 2142-2143)

However, one of ordinary skill in the art would have been motivated to apply glyphosate seven days apart because it is known in the art that glyphosate can reduce disease severity when applied to glyphosate-tolerant soybeans at different growth stages, as suggested by Sanogo.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to apply glyphosate seven days apart because it is merely routine experimentation for one of ordinary skill in the art to determine the appropriate

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spacing of application times that would be beneficial to plants infected with sudden death syndrome. Further, it is also routine experimentation for one of ordinary skill in the art to determine the necessary number of applications that are required to achieve the desired activity against the fungal disease.

Therefore, the claimed invention would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

Conclusion

12. No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KRISTIE L. BROOKS whose telephone number is (571)272-9072. The examiner can normally be reached on M-F 8:30am-6:00pm Est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kristie L Brooks

Examiner, Art Unit 1616

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616